

CLAIMS

1. Drug-containing sustained release
microparticles characterized by comprising a drug other than
human growth hormone and a porous apatite derivative.
- 5 2. Drug-containing sustained release
microparticles characterized by comprising a drug other than
human growth hormone, a porous apatite derivative and a
water-soluble bivalent metal compound.
3. The drug-containing sustained release
10 microparticles according to claim 1 or 2, characterized in
that the porous apatite derivative is a porous apatite
derivative in which a portion of calcium as a constituent of
hydroxyapatite is substituted with zinc during production.
4. The drug-containing sustained release
15 microparticles according to claim 3, characterized in that
the porous apatite derivative has a zinc substitution rate
or zinc content rate of 0.1 to 2.0.
5. The drug-containing sustained release
microparticles according to claim 2, characterized in that
20 the water-soluble bivalent metal compound is a zinc compound.
6. The drug-containing sustained release
microparticles according to claim 5, characterized in that
the water-soluble bivalent metal compound is zinc chloride
or zinc acetate.
- 25 7. A preparation for parenteral administration
characterized by comprising, drug-containing sustained
release microparticles according to any of claims 1 to 6.

8. The preparation according to claim 7, characterized in that the preparation for parenteral administration is either a subcutaneous injection or an intramuscular injection.

5 9. A process for producing drug-containing sustained release microparticles characterized by comprising: dispersing under agitation microparticles of a porous apatite derivative in an aqueous solution containing a drug so that the aqueous solution infiltrates into the porous
10 apatite derivative; adding thereto an aqueous solution containing a water-soluble bivalent metal compound so that the water-soluble bivalent metal compound infiltrates into the porous apatite derivative; further adding an additive such as a stabilizer to the mixture; and effecting lyophilization
15 or vacuum-drying.

10. The production process according to claim 9, characterized in that the porous apatite derivative is a porous apatite derivative in which a portion of calcium as a constituent of hydroxyapatite is substituted with zinc during
20 production.

11. The production process according to claim 10, characterized in that the porous apatite derivative has a zinc substitution rate or zinc content rate of 0.1 to 2.0.

12. The process according to claim 9, characterized
25 in that the water-soluble bivalent metal compound is zinc chloride or zinc acetate.